
Preparing the system

This chapter describes how to prepare ISDN BRI equipment for acceptance testing. It explains how to verify that ISDN BRI cards are enabled and functioning correctly and how to correct any problems before starting the test.

Verifying ISDN BRI operation

After ISDN BRI equipment has been installed and configured, you can visually inspect ISDN BRI cards to make sure that they are operating correctly by observing their LEDs:

- Check the red Dis LED located on the MISP faceplate. If the Dis LED on an MISP is lit, check that the MISP is disabled or faulty. If it is extinguished, check that the MISP is enabled and operating. To enable the MISP or to correct a problem, refer to *ISDN BRI Maintenance*.
- Check the red LED located on the BRSC faceplate. If the red LED is extinguished, check that the BRSC is enabled and operating correctly. If the red LED is lit, check that the BRSC is manually disabled or faulty. To enable a BRSC or to correct a problem, refer to *ISDN BRI Maintenance*.
- Check the red LED located on the SILC and UILC faceplates. If the red LED is extinguished, check that the SILC or UILC is enabled and operating correctly. If the red LED is lit, check that the SILC or UILC is manually disabled or faulty. To enable an SILC or a UILC or to correct a problem, refer to *ISDN BRI Maintenance*.

If all indicator LEDs on ISDN BRI equipment are extinguished (with the exception of the CC LED on a MISP), the equipment is functional and you may proceed with setting up the terminals you wish to use for this test.

Setting up ISDN BRI test terminals and trunks

Setting up ISDN BRI terminals

To conduct acceptance testing for ISDN BRI terminals, you must have a setup that can verify basic ISDN BRI functions and features. Figure 1 shows an example of the ISDN BRI terminal arrangement. You may wish to establish a different test setup, which may be determined by the type of terminals implemented in a specific customer configuration. You may want to set up communication between ISDN BRI and non-ISDN terminals.

Refer to the *ISDN BRI Installation* for ISDN BRI terminal installation instructions.

Performing acceptance testing

To perform acceptance testing of ISDN BRI terminals:

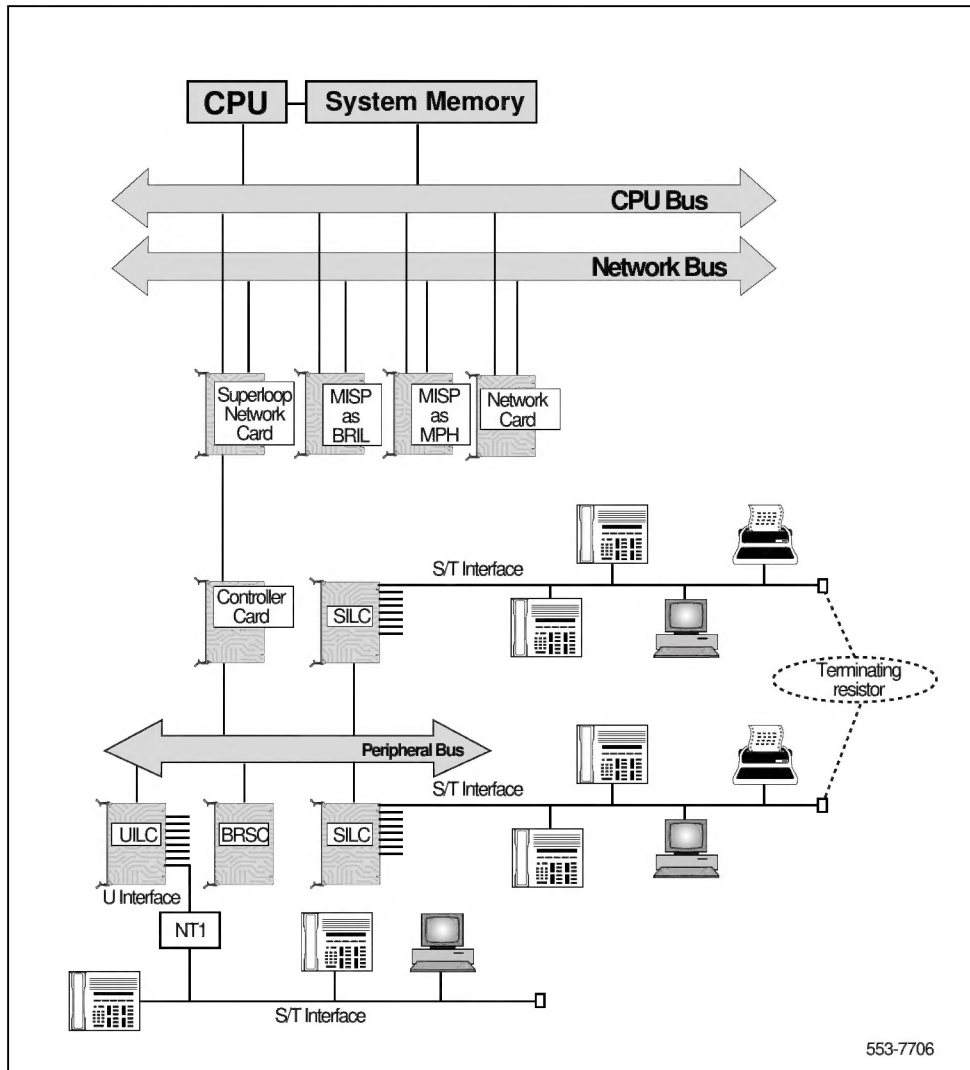
- select three digital subscriber loops (DSLs), two connected to different SILCs and one to a UILC.
- equip each SILC DSL with two voice, one circuit-switched data, and one low speed packet data ISDN BRI terminals.

Note: Packet data testing can be conducted only if an external packet handler or an MPH is installed as part of the customer configuration, and is supported by the Meridian 1 (like the external DPN-100 packet handler). If packet handler is not part of the configuration, do not equip the DSLs with packet data terminals and skip all the packet data tests specified in this chapter.

- equip the UILC DSL with a network terminator (NT1) and connect the two voice and one circuit-switched data ISDN BRI terminal to the S/T interface on the NT1.
- configure the DSLs to support these ISDN BRI terminals and initialize the terminals as described in the “Initializing ISDN BRI terminals” section of the *ISDN BRI Administration*.

After you have completed the setup to perform acceptance testing, you can proceed with the tests described in the next chapter.

Figure 1
ISDN BRI acceptance testing setup for terminals



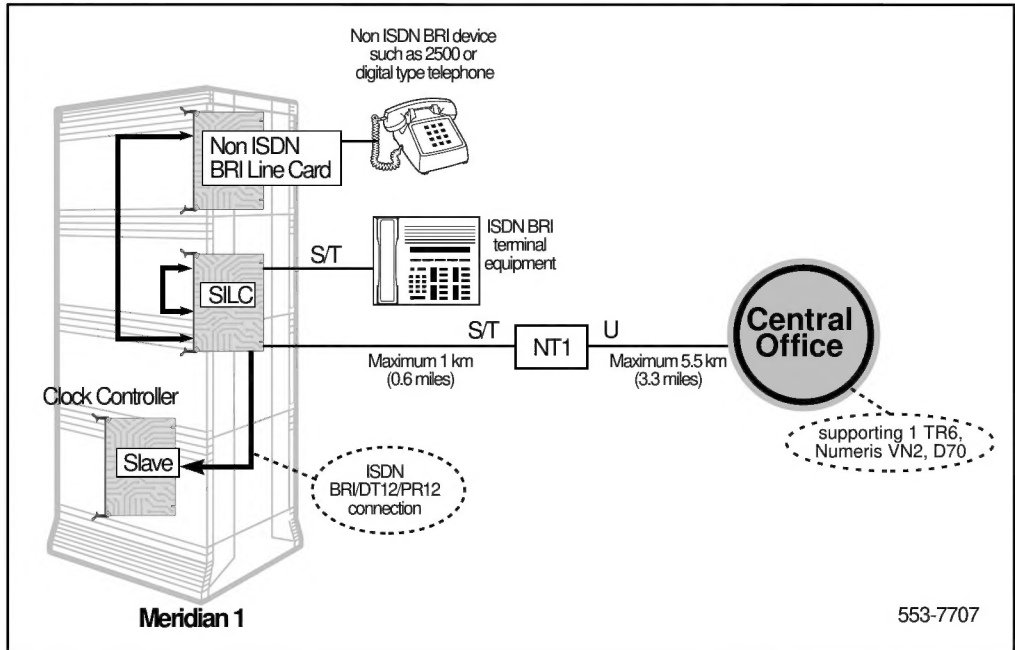
Setting up ISDN BRI trunking - Local Exchange connectivity

Figure 2 illustrates a typical configuration that may be used for testing ISDN BRI Local Exchange connectivity. The ISDN BRI Local Exchange DSL is connected to a Network Termination (NT1) device, which is physically located on the same premises as the Meridian 1. The NT1 device connects to the Local Exchange that supports Numeris VN2, 1TR6 or D70 protocol via a U interface. The distance limitation of the NT1 from the Local Exchange depends on the distance supported by the Local Exchange.

System clock synchronization may be achieved by having the Meridian 1 slave to the local exchange; the clock source may be derived either from the ISDN BRI Local Exchange connection or from other ISDN BRI/PRI2/DTI2 local exchange connections if available for the test environment.

After you have completed the setup to perform acceptance testing, you can proceed with the test described in the next chapter.

Figure 2
ISDN BRI acceptance testing setup for trunking - Local Exchange connectivity



Setting up ISDN BRI trunking - Tie trunk connectivity

Figure 3 illustrates one of the configurations that may be used for testing ISDN BRI Tie trunk connectivity. In this configuration, a Meridian Customer Defined Networking (MCDN) TIE trunk connection may be implemented by connecting two Meridian 1s to the ISDN BRI leased line through the local exchange via two SILC cards. The S/T interface is connected to the local exchange using an NT1. There is no distance limitation on this configuration. System clock synchronization may be achieved by having the Meridian 1 slave to the local exchange; the clock source may be derived either from the ISDN BRI local exchange connections or from other ISDN BRI/PRI2/DTI2 local exchange connections if available.

Figure 3
ISDN BRI acceptance testing setup for trunking - Tie trunk connectivity

